

TOWN OF BROOKFIELD CONNECTICUT



TOWN OF BROOKFIELD, CT STORMWATER MANAGEMENT PLAN March 2017

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Request for Public Review and Comments

This SWMP will be posted and maintained on the Town of Brookfield website. The Town encourages public participation and review. If any member of the public has any questions or comments they should be directed to publicworks@brookfieldct.gov

INTRODUCTION / OVERVIEW

This Stormwater Management Plan (SMP) was developed by the Town of Brookfield in partnership with Western Connecticut Council of Governments (WestCOG) for the purpose of implementing and enforcing a stormwater management program to reduce the discharge of pollutants from the town's storm sewer system to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate requirements of the Federal Clean Water Act and the Ct Department of Energy and Environmental Protection's (DEEP's) MS4 General Permit¹.

The measures identified in this SMP will be applied throughout the boundaries of the Town of Brookfield except as otherwise noted and consistent with the MS4 General Permit requirements.

Individual facilities such as maintenance garages, salt sheds and other miscellaneous facilities are will be covered under general permits (industrial) with the Connecticut Department of Environmental Protection (CTDEP).

This plan has been retained by the First Selectman and provided to all Brookfield MS4 officials and employees responsible for implementation of the Plan.

This plan will be updated whenever:

- 1) There is a change with the potential to cause pollution to the waters of the state;
- 2) The actions detailed herein fail to prevent pollutions of state waters or fail to comply with requirements of the permit;
- 3) The Commissioner of the DEEP requests modification.

A copy of the Plan review certification will be included with this Plan when provided.

SMP Structure

The plan outlines a program of best management practices (BMPs), the responsible party to implement the BMP, the schedule of implementation, and measurable goals for the following six minimum control measures.

- (1) Public education and outreach on stormwater impacts
- (2) Public involvement / participation
- (3) Illicit discharge detection and elimination

¹ CT DEEP's MS4 Permit is effective July 1, 2017 and expires June 30, 2022. More information on the MS4 General permit can be found here: http://www.ct.gov/deep/cwp/view.asp?a=2721&q=558562&deepNav_GID=1654

- (4) Construction site stormwater runoff control
- (5) Post-construction stormwater management in new development and redevelopment
- (6) Pollution prevention/good housekeeping for municipal operations

A section following the 6 minimum control measures covers additional requirements established under the MS4 permit.

The appendices include the additional plans and programs which are referenced in this document.

Plan Development Process

The development of the SMP was performed by the Town of Brookfield. This plan utilizes a Template generated by WestCOG and UConn CLEAR. The town of Brookfield has adapted the template to include municipal specific details. The adapted SMP was then sent to DEEP for approval.

As part of the development of the SMP, a working committee was established with the Director of Public Works, Land Use Manager and Land Use Enforcement Officer.

Annual Reporting

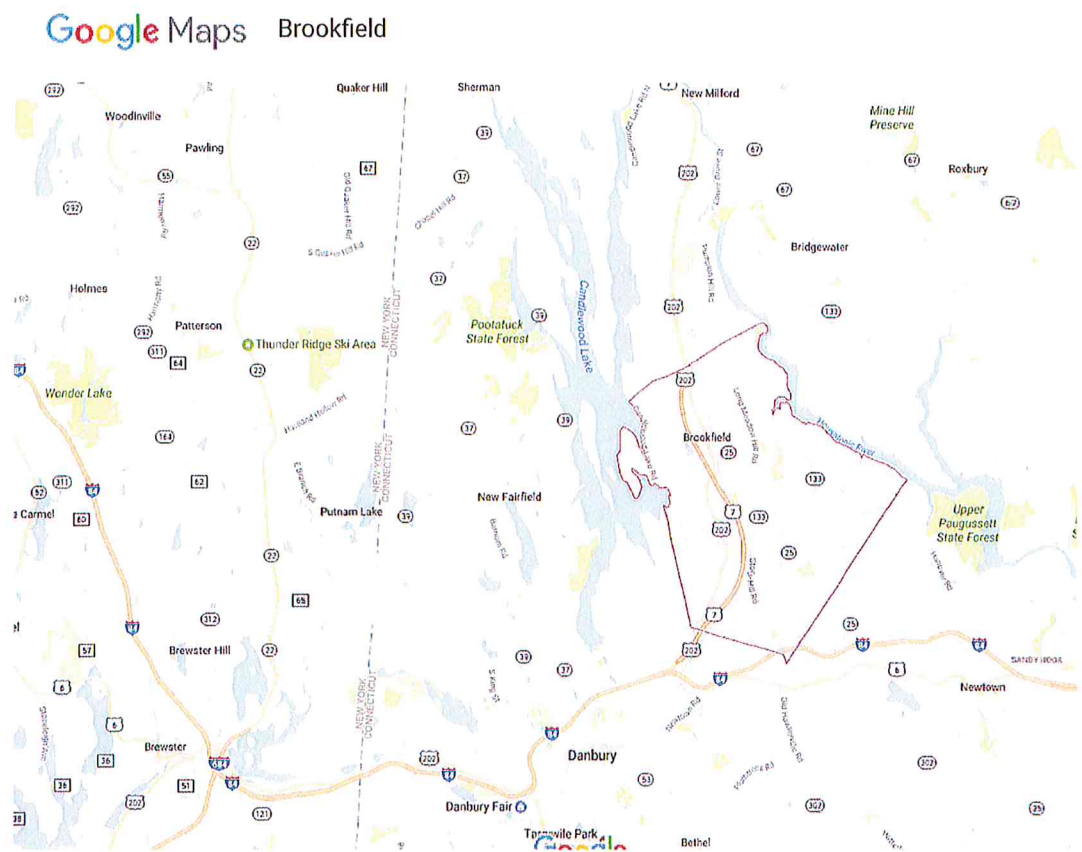
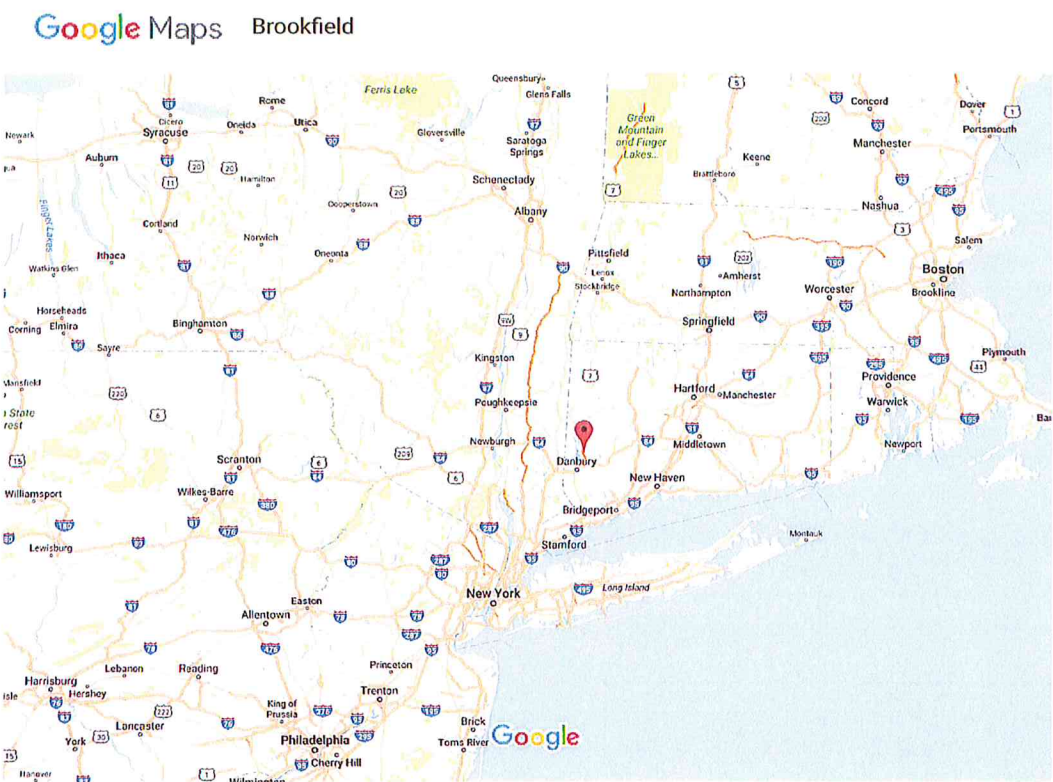
By April 1, 2019 and annually thereafter by April 1, the Town of Brookfield will submit an Annual Report, in pdf format, summarizing activities undertaken to implement this plan for the preceding calendar year electronically to the Department. The Annual Reports will also be made available to the public in compliance with the public involvement section of this plan.

Record Keeping

The Town of Brookfield shall keep records required by the MS4 General Permit for at least 5 years following its expiration or longer if requested by the Commissioner in writing. Such records, including the Stormwater Management Plan, shall be available to the public at reasonable times during regular business hours.

Description of Municipality

The Town of Brookfield covers an area of approximately sixteen square miles and is located in Western Connecticut. It is bordered by Candlewood Lake and the City of Danbury to the west, Lake Lillinonah and Bridgewater to the east, the town of Newtown to the south and the Town of New Milford to the north. The Still River runs through the middle flowing south to north.



Endangered or Threatened Species

The Town of Brookfield will comply with the State of Connecticut Endangered Species Act CGS section 26-310 (a). The Town will conserve endangered and threatened species and their essential habitats and shall ensure that any action authorized, funded or performed by the Town does not threaten the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat designated as essential to such species unless the Town has been granted exemption by the CT DEEP. Due to the low impact nature of our work under this the Town does not anticipate a conflict to occur. A map detailing the locations in Brookfield that may contain endangered or threatened species is contained in appendix C.

Aquifer Protection Area

A small portion of Brookfield's MS4 fall within a Level "A" Aquifer Protection Area. A map detailing this area is in appendix D. There is no new activity being implemented or planned within this area under this permit term.

(1) Public Education and Outreach

Goals:

- *To raise awareness that polluted stormwater runoff is the most significant source of water quality problems;*
- *To motivate residents to use Best Management Practices (BMPs) which reduce polluted stormwater runoff; and*
- *To reduce polluted stormwater runoff as a result of increased awareness and utilization of BMPs.*

Minimum Requirements:

- (A) Implement Public Education Program
- (B) Develop/acquire educational materials
- (C) Incorporate Phosphorous, Nitrogen, Bacteria, Mercury into materials as needed (topics will be addressed based on what impairments have been found in the town's water ways.)

The following Best Management Practices (BMPs) will be implemented to address the minimum control measure for Public Education and Outreach. The following BMPs and implementation schedule serve as Brookfield's MS4 Public Education Program.

1.1 Develop/Acquire Education Materials (B), (C)

Brookfield, with support from WestCOG, will acquire and/or develop associated stormwater education materials generated by partner organizations. Materials will be reviewed annually and updated as

needed. The educational materials will address phosphorus, nitrogen, bacteria, and mercury impairments and how they might relate to the following practices.

- sources of stormwater
- impact of stormwater on water bodies
- steps residents can take to reduce pollutants in stormwater runoff
- septic systems
- fertilizer use
- grass clippings & leaves management
- detergent use
- sediment discharge
- Sanitary cross connections
- Waterfowl
- Pest waste
- Manure piles
- Mercury disposal and recycling

1.2 Web based MS4 library (A)

The Brookfield, with support from WestCOG will generate a web based library of educational resources for the public in regards to stormwater. Materials on the website will be tailored to the various pollutants found within the regions MS4 and also provide municipal specific education materials where applicable. The Brookfield website <http://www.brookfieldct.gov/Pages/index> will link directly to this web based library and promote the availability of these materials. WestCOG will add/remove materials as requested by the towns as well as an annual review of all materials on the website.

1.3 Printed MS4 educational materials (A)

The Brookfield will provide materials in a printed format to be on display in public locations within Brookfield town hall and a public Library.

1.4 Targeted Outreach (A)

Brookfield will identify locations where their MS4 discharges into impaired waters and provide educational outreach specific to the sources of that impairment. Targeted outreach efforts may include K-12 students, agricultural areas, commercial businesses, developers, homeowners, etc.

1.5 Partner organizations (A)

WestCOG will identify all the existing organizations which currently, or potentially, provide stormwater education and outreach within Brookfield. As part of this activity WestCOG will generate a database of partners and their associated information, which can help inform annual reporting. Contacts will be updated on an ongoing process and will be reviewed annually.

1.6 Reporting (A)

Brookfield will summarize the types, sources, number and method by which materials are disseminated each year in its annual report.

Table 1 Outreach/Education Schedule

	BMP	Responsible Person
2017	Web Based Library of MS4 educational materials	UConn Clear / WestCOG / Land Use
	Foster partnerships with existing organizations	WestCOG / DPW / Land Use
	Provide printed materials for municipal buildings	Land Use
	Targeted outreach	Land Use / Sanitarian / DPW / Zoning
	Develop/acquire education materials	UConn / WestCOG / Land Use
2018	Update Website	DPW / IT
	Review Partnerships	WestCOG / DPW
	Targeted outreach	Land Use / Sanitarian / DPW / Zoning
	Review Education Materials	UConn Clear / WestCOG / Land Use
2019	Update Website	DPW / IT
	Review Partnerships	WestCOG / DPW / Land Use
	Targeted outreach	Land Use / Sanitarian / DPW / Zoning
	Review Education Materials	UConn Clear / WestCOG / Land Use
2020	Update Website	DPW / IT
	Review Partnerships	WestCOG / DPW / Land Use
	Targeted outreach	Land Use / Sanitarian / DPW / Zoning
	Review Education Materials	UConn Clear / WestCOG / Land Use
2021	Update Website	DPW / IT
	Review Partnerships	WestCOG / DPW / Land Use
	Targeted outreach	Land Use / Sanitarian / DPW / Zoning
	Review Education Materials	UConn Clear / WestCOG / Land Use

(2) Public Involvement / Participation

Goal:

Involve the community in both the planning and implementation process of improving water quality.

Minimum Requirements:

(A) Provide public notice for this plan and annual reports, minimum 30 days.

The following BMP's will be utilized in the implementation of the program to address the minimum control measure for Public Involvement and Participation.

2.1 Public notice (A)

Brookfield will publish a public notice on its website <http://www.brookfieldct.gov/Pages/index>. The notice will provide a contact name, phone number, address, and email to whom the public can send comments. Additionally, the Municipal Stormwater Plan (MSP) and Annual Report will be publicly accessible on the web <http://www.brookfieldct.gov/Pages/index> and in Brookfield town hall and/or library. The public notice shall allow for a 30-day comment period, at a minimum. The public notice will be made annually no later than January 31.

2.2 Public comment reporting (A)

WestCOG will collect public comments through mail and email. The results of which will be summarized and presented to public works directors at the following Technical Advisory Group (TAG) meeting. A discussion of recommendations will take place during the TAG meeting. Additionally, prior to the TAG meeting Brookfield will receive all public comments associated with it.

Table 2

	BMP	Responsible Person
2017	Send out public notice for MSP public comment	DPW
	Review public comments	DPW
2018	Send out public notice for annual report public comment	DPW
	Review public comments	DPW
2019	Send out public notice for annual report public comment	DPW
	Review public comments	DPW
2020	Send out public notice for annual report public comment	DPW
	Review public comments	DPW
2021	Send out public notice for annual report public comment	DPW
	Review public comments	DPW

(3) Illicit Discharge Detection and Elimination

Goal:

Find the source of any illicit discharges; eliminate those illicit discharges; and ensure ongoing screening and tracking to prevent and/or eliminate future illicit discharges.

Actions:

- (A) Develop IDDE Program in Priority Areas.
- (B) Establish legal authority necessary to prohibit, investigate and eliminate illicit discharges.
- (C) IDDE Program Implementation
- (D) Develop a citizen reporting program for suspected illicit discharges
- (E) Ensure ongoing screening and tracking of MS4 outfalls for illicit discharges.
- (F) Track illicit abatement activities.
- (G) Develop a list and map of all stormwater discharges.
- (H) Report failing septic systems for waters for which phosphorous, nitrogen, or bacteria is a pollutant of concern.

The following BMPs will be utilized in the implementation of the program to address the minimum control measure for Illicit Discharge Detection and Elimination. All activities will be completed in Brookfield's urbanized area and catchment areas with directly connected impervious area (DCIA) > 11% or outfalls that discharge to impaired waters.

3.1 Develop IDDE program (A)

A written program will be developed by July 1, 2018 to detect, locate and eliminate illicit discharges (to the maximum extent practicable) from the MS4 within Brookfield's Priority Areas (urbanized area, DCIA>11%, and where discharges to impaired waters). The program will provide adequate legal authority, assign program responsibilities, and develop a citizen reporting program. The program will outline and implement outfall screening and IDDE protocols consistent with Appendix B of the MS4 General Permit to identify, prioritize, and investigate MS4 catchments for suspected illicit discharge of pollutants. Also, the written program will outline follow-up screening and illicit discharge prevention procedures.

3.2 IDDE program legal authority (B)

By July 1, 2018 Brookfield will establish [or update] the necessary and enforceable legal authority by statute, ordinance, rules and regulations, permit, easement, contract, order or any other means, to eliminate illicit discharges. The authority shall (Text directly from MS4 Permit):

- a. *prohibit illicit discharges to its storm sewer system and require removal of such discharges consistent with the deadlines outlined in the MS4 general; and*
- b. *authorize the investigation of suspected illicit discharges and elimination of illicit discharge, including from properties not owned or controlled by the MS4 that discharge to the MS4*
- c. *control the discharge of spills and prohibit the dumping or disposal of materials including, but not limited to, residential, industrial and commercial wastes, trash, used motor vehicle fluids,*

pesticides, fertilizers, food preparation waste, leaf litter, grass clippings, and animal wastes into its MS4; and

- d. authorize appropriate enforcement procedures and actions;*
- e. authorize fines or penalties and/or recoup costs incurred by the permittee from anyone creating an illicit discharge or spilling or dumping. For state and federal institutions, where this provision may conflict with existing rules, regulations, policies, chain of command or other circumstances, alternate provisions for enforcement may be utilized. [this is a new requirement]*

3.3 IDDE program implementation (C) (H)

Brookfield will implement the IDDE program elements identified in IDDE protocol in Appendix B of the MS4 permit within the Urbanized Area and those catchment areas of the MS4 with either Directly Connected Impervious Area (DCIA) of greater than 11% (as identified on maps available at www.ct.gov/deep/municipalstormwater) or which discharge to impaired waters ("priority" areas). Brookfield will develop a prioritizing strategy to identify areas outside these identified areas to further implement these IDDE measures.

Brookfield will prioritize areas with the highest potential of discharging phosphorous, nitrogen, bacteria. These areas "shall be identified based on assessment of the following criteria: historic on-site sanitary system failures, proximity to bacteria impaired waters, low infiltrative soils, and shallow groundwater" (DEEP 2016).

3.4 Citizen reporting program (D)

Brookfield will establish a system to allow for citizen reporting of suspected illicit discharges into the stormwater system. The system will include an email address and/or phone number or other means for submitting a report. Brookfield will affirmatively investigate and eliminate any illicit discharges for which a time and location of discharge are provided. Brookfield will promptly inspect the reported outfall or manhole and proceed according to the requirements of the written IDDE program. All citizen reports and responses will be included in Brookfield's annual report.

3.5 Ongoing screening and tracking (E)

Brookfield, upon completion of catchment investigation and illicit discharge removal and confirmation (if necessary) for the catchment outfall or interconnection, will schedule follow-up screening within five years, or sooner as determined by the catchment's illicit discharge priority. Follow-up screening shall consist of dry weather screening and sampling except where wet weather screening and sampling is required as detailed in Appendix B of the MS4 permit.

3.6 Track illicit abatement activities (F)

Brookfield will maintain a record of illicit discharge abatement activities including: location (identified with an address or latitude and longitude), description, dates of inspection, sampling data (if applicable), actions taken, date of removal or repair and responsible parties. This information shall be included in the permittee's Annual Report.

3.7 Stormwater discharge list and map (G)

By June 30, 2019, Brookfield will develop [or complete] a geodatabase of all stormwater discharges from a pipe or conduit located within and owned or operated by the municipality and all interconnections with other MS4s. Each entry will include the following:

- a. *Type, material, size, shape and location (identified with a latitude and longitude) of conveyance, outfall or channelized flow (e.g. 24" concrete pipe);*
- b. *the name, water body ID and Surface Water Quality Classification of the immediate surface waterbody or wetland to which the stormwater runoff discharges;*
- c. *if the outfall does not discharge directly to a named waterbody, the name and water body ID of the nearest named waterbody to which the outfall eventually discharges;*
- d. *the name of the watershed, including the subregional drainage basin number (available from CT ECO at www.cteco.uconn.edu) in which the discharge is located;*
- e. *date of most recent inspection of the outfall, the condition, and any indicators of potential non-stormwater discharges as of most recent inspection;*

The database will be exported into excel format for annual reports.

Brookfield will locate stormwater drainage sites not already accounted for. Annual updates will capture any additions to the stormwater infrastructure within Brookfield.

[Include mapping update process here]

3.8 Detailed system map (G)

Brookfield will revise and/or a detailed map of the MS4 by June 30, 2020. The map will include:

- Parts of the MS4 within priority areas (parts of the MS4 that are within an urbanized area, catchment areas with directly connected impervious area (DCIA) > 11%, and outfalls that discharge to impaired waters);
- Outfalls & receiving waters;
- Pipes; Open channel conveyances; Catch basins; Man holes;
- Interconnections with other MS4s and other storm sewer systems;
- Stormwater treatment structures owned by the municipality (or institution) (e.g. detention & retention ponds, infiltration systems, bioretention areas, water quality swales, gross particle separators, oil/water separators, or other systems);
- Catchment delineations for each outfall;
- Impaired water bodies identified by name and use impairment as defined by the most recent integrated water quality report;
- Municipal sanitary sewer system (if available);
- Municipal combined sewer system (if applicable).

The TOWN will update the map as new information becomes available and will report on the progress of the development of this map in the annual report.

Table 3

	BMP	Responsible Person
2017	Develop a written IDDE program	UConn Clear / DPW / Land Use / Zoning/HVA

	Review Existing legal authority	DPW / Land Use / Zoning
	Establish legal authority to eliminate illicit discharges	Zoning
	Develop mapping platform and database	DPW
	Establish citizen reporting program	DPW
	Track illicit abatement activities	DPW / Land Use / HVA
	Inventory existing mapped infrastructure data	DPW
2018	Map remaining infrastructure	DPW
	Track illicit abatement activities	DPW / Land Use / HVA
	Perform ongoing screening and tracking (if needed)	DPW / Land Use / HVA
2019	Perform ongoing screening and tracking (if needed)	DPW / Land Use / HVA
	Finalize MS4 web map	DPW
	Track illicit abatement activities	DPW / Land Use / HVA
	Update mapping database	DPW
2020	Perform ongoing screening and tracking (if needed)	DPW / Land Use / HVA
	Track illicit abatement activities	DPW / Land Use / HVA
	Update mapping database	DPW
2021	Perform ongoing screening and tracking (if needed)	DPW / Land Use / HVA
	Track illicit abatement activities	DPW / Land Use / HVA
	Update mapping database	DPW

(4) Construction Site Stormwater Runoff Control

Goal:

to control stormwater discharges (to its MS4) associated with land disturbance or development (including re-development) activities from sites (as defined in the Department's General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities) with one acre or more of soil disturbance, whether considered individually or collectively as part of a larger common plan.

Actions:

- (A) Establish legal authority to implement construction site stormwater runoff control.
- (B) Develop and implement interdepartmental coordination plan.
- (C) Perform site reviews.
- (D) Perform site inspections.
- (E) Incorporate public involvement into development activities.
- (F) Notify developers of CT DEEP's construction general permit.

The following BMP's will be utilized to control stormwater discharges associated with land disturbance, development, or redevelopment of sites with 1 acre or more of soil disturbance.

4.1 Legal authority for construction site stormwater control (A)

By June 30, 2019, Brookfield will revise its land use regulations to establish the necessary and enforceable legal authority to control stormwater runoff on construction sites with soil disturbance of more than 1 acre, such that:

- a. *developers, construction site operators, or contractors maintain consistency with the 2002 Guidelines for Soil Erosion and Sedimentation Control, as amended, the Connecticut Stormwater Quality Manual, and all stormwater discharge permits issued by the DEEP within the municipal or institutional boundary pursuant to CGS 22a-430 and 22a-430b;*
- b. *the implementation of additional measures to protect/improve water quality (in addition to the above requirements) as deemed necessary by Brookfield;*
- c. *Brookfield is authorized to carry out all inspection, surveillance and monitoring procedures necessary to determine compliance with municipal regulations, ordinances or programs or institutional requirements related to the management of Brookfield's MS4. Inspections shall be conducted, where allowed, to inventory the number of privately-owned retention ponds, detention ponds and other stormwater basins that discharge to or receive drainage from the permittee's MS4;*
- d. *the owner of a site seeking development approval from Brookfield shall provide and comply with a long term maintenance plan and schedule to ensure the performance and pollutant removal efficiency of privately-owned retention ponds, detention ponds and other stormwater basins that discharge to or receive discharge from [TOWN's] MS4 including short-term and long-term inspection and maintenance measures to be implemented by the private owner;*
and

- e. Brookfield will control, through interagency or inter-jurisdictional agreements, the contribution of pollutants between the permittee's MS4 and MS4s owned or operated by others.*

4.2 Interdepartmental coordination (B)

Brookfield's plan to coordinate the functions of all the departments and boards involved in the review, permitting, or approval of land disturbance projects is as follows:

Through town meetings and other scheduled meetings specific to each project.

4.3 Construction site reviews and inspections (C), (D)

Brookfield will conduct site plan reviews that incorporate consideration of stormwater controls or management practices to prevent or minimize impacts to water quality on sites with soil disturbance of 1 acre or more. Brookfield will also conduct site inspection(s) and enforcement to assess the adequacy of the installation, maintenance, operation, and repair of construction and post construction control measures.

4.4 Incorporate public involvement into development activities (E)

Brookfield's procedure for public involvement in the consideration of proposed and ongoing development and land disturbance activities is as follows:

Information submitted by the public is forwarded to the Public Works Department within the town for consideration. Information related to construction site runoff is forwarded to the Zoning Enforcement Officer and Director of Public Works and Land Use Departments

4.5 Notify developers of permit requirements. (F)

Brookfield's will notify developers or contractors of their potential obligation to obtain authorization under DEEP's General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities (construction general permit) if their project disturbs more than 1 acre of land and results in a point source discharge to Connecticut surface waters directly or through the Brookfield MS4. Brookfield will also require a copy of the Storm Water Pollution Control Plan be made available to the town on request. The procedure to notify developers of the construction general permit is as follows:

Brookfield will inform developers (working with the municipality) that they have a potential obligation to obtain authorization under the DEEP's General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities ("construction general permit") if their development or redevelopment project disturbs one or more acres of land, either individually or collectively, as part of a larger common plan, and results in a point source discharge to the surface waters of the state directly or through the permittee's MS4. The notification shall include a provision informing the developer/ contractor of their obligation to provide a copy of the Storm Water Pollution Control Plan (required by the construction general permit) to the permittee upon request. The contractor is required at all times to conduct his operations in conformity with all Federal and State permit requirements concerning water, air, noise pollution and the disposal of contaminated, or hazardous materials.

Table 4 Construction site stormwater management implementation schedule

	BMP	Responsible Person
2017	Review existing language on construction site storm water management	Zoning / Land Use
	Develop interdepartmental coordination plan	Zoning / Land Use
	Implement interdepartmental coordination plan	Zoning / Land Use
	Implement site review and inspections program	Zoning / Land Use
	Implement public involvement component into development	Zoning / Land Use
	Implement process to notify developers of MS4 permit requirements	Zoning / Land Use
2018	Establish legal authority for construction site stormwater control	Zoning / Land Use
	Continue implementing previous practices	Zoning / Land Use
2019	Continue implementing previous practices	Zoning / Land Use
2020	Continue implementing previous practices	Zoning / Land Use
2021	Continue implementing previous practices	Zoning / Land Use

(5) Post-construction Stormwater Management in New Development or Redevelopment

Goal:

Incorporate and maintain LID in new development and redevelopment.

Minimum Requirements:

- ☐ (A) Establish Legal Authority
- ☐ (B) Runoff Reduction/Low Impact Development (“LID”) Measures
- ☐ (C) Directly Connected Impervious Area
- ☐ (D) Long Term Maintenance
- ☐ (E) Additional measures for discharges to impaired waters (with or without a TMDL)

The following BMP’s will be utilized in the implementation of the program to address the minimum control measure for Post-construction Stormwater Management in New Development or Redevelopment.

5.1 Legal authority for post-construction stormwater management (A)(B)

By June 30, Brookfield will establish legal authority to minimize the impact of new development and redevelopment on the MS4 and water bodies by minimizing impervious surfaces, encouraging LID, preserving ecologically sensitive areas, protecting trees, other vegetation and native soils, and preventing thermal impacts to streams. Brookfield will require, to the maximum extent possible, *“that a developer or contractor seeking the permittee’s approval shall consider the use of low impact development (“LID”) and runoff reduction site planning and development practices prior to the consideration of other stormwater managements practices allowed in the permittee’s land use regulations, guidance or construction project requirements.”* (Text directly from MS4 Permit):

Such legal authority will include the following standards:

- 1) for redevelopment of sites that are currently developed with Directly Connected Impervious Area (DCIA) of forty percent or more, the project must retain on-site half the water quality volume for the site, or
- 2) for new development and redevelopment of sites with less than forty percent DCIA, retain the water quality volume for the site, or
- 3) if either of those retention standards cannot be met, the developer will be required to provide a report indicating why the standard could not be met and a mitigation project on another property or pay a fee to fund a DCIA retrofit.

In developing this legal authority Brookfield will consider the following watershed protection elements as defined in the 2017 MS4 Permit:

- a. *Minimize the amount of impervious surfaces (roads, parking lots, roofs, etc.) within each municipality by minimizing the creation, extension, and widening*

of parking lots, roads, and associated development and encourage the use of Low Impact Development or green infrastructure practices.

- b. Preserve, protect, create and restore ecologically sensitive areas that provide water quality benefits and serve critical watershed functions. These areas may include, but are not limited to; riparian corridors, headwaters, floodplains and wetlands.*
- c. Implement stormwater management practices that prevent or reduce thermal impacts to streams, including requiring vegetated buffers along waterways, and disconnecting discharges to surface waters from impervious surfaces such as parking lots.*
- d. Maintain consistency with the Connecticut Stormwater Quality Manual in the design and installation of any stormwater management practices.
- e. Seek to avoid or prevent hydromodification of streams and other water bodies caused by development, including roads, highways, and bridges.
- f. Implement standards to protect trees, and other vegetation with important evapotranspirative qualities.
- g. Limitation of turf areas.
- h. Implement policies to protect native soils, prevent topsoil stripping, and prevent compaction of soils.
- i. Coordination with state or local health officials to ensure no interference with on-site septic systems.

5.2 Reduce regulatory barriers for implementing LID (A)

Brookfield will identify and, where appropriate, reduce or eliminate existing local regulatory barriers to implementing LID and runoff reduction practices to the MEP. Brookfield will work with WestCOG on the identification of local regulatory barriers. If the barriers are not removed by 2021 Brookfield will provide justification in the annual report along with a revised schedule for implementation.

5.3 Runoff Reduction/Low Impact Development (“LID”) Measures (B)

By June 30 2019, Brookfield will require the parties responsible for new development or redevelopment projects to the following regarding the retention of stormwater on site as depicted by the legal authority identified in section 5.1.

Any systems designed and installed to meet these requirements must be consistent with the Connecticut Stormwater Quality Manual. If not consistent, a report must be provided detailing why that is not feasible.

Developers will also be required to consult with local health officials in areas with onsite septic to ensure any retention practices do not interfere with the functioning of those systems.

5.4 Directly Connected Impervious Area (DCIA) mapping (C)

By June 30, 2020, Brookfield will utilize a mapping methodology developed by WestCOG to calculate the Directly Connected Impervious Area (DCIA) that contributes stormwater runoff to each of its MS4 outfalls. Progress on this task will be documented in each annual report until completion. The methodology to update to DCIA mapping is being developed with WestCOG.

5.5 Detention/retention pond long term maintenance plan (D)

BY June 30, 2020, Brookfield will develop a maintenance plan which will address retention or detention ponds that it owns or over which it holds an easement or other authority in its priority areas to ensure their long-term effectiveness. This plan will include an annual inspection of those retention and detention ponds and removal of accumulated sediment in excess of 50% design capacity. For waters which **Nitrogen, Phosphorus** or **Bacteria** is a Stormwater Pollutant of Concern and erosion or sedimentation problems are found during the annual inspections, Brookfield will prioritize those areas for the DCIA retrofit program un minimum control measure 6 – Pollution Prevention/Good Housekeeping...

5.6 Stormwater treatment structures long term maintenance plan (D)

BY June 30, 2020, Brookfield will develop a maintenance plan which will address stormwater treatment structures (swirl, concentrators, oil/grit separators, water quality wetlands or swales, etc.) that it owns or over which it holds an easement or other authority in its priority areas to ensure their long-term effectiveness. This plan will include an annual inspection all such structures/measures and remove accumulated pollutants (such as sediment, oils, leaves, litter, etc.) to restore full solids capture design capacity where found to be in excess of 50% design capacity. For waters which **Nitrogen, Phosphorus** or **Bacteria** is a Stormwater Pollutant of Concern and erosion or sedimentation problems are found during the annual inspections, Brookfield will prioritize those areas for the DCIA retrofit program in minimum control measure 6 – Pollution Prevention/Good Housekeeping.

Table 5 Post construction stormwater management implementation schedule

	BMP	Responsible Person
2017	Review existing legal authorities for post-construction storm water management	Zoning / Land Use
	Develop DCIA Mapping Methodology	WestCOG / DPW
2018	Require developers to incorporate "LID" measures	Zoning
	Develop maintenance plan for detention/retention ponds	Zoning
	Develop maintenance plan for stormwater treatment structures	Zoning
	Provide an update on DCIA Mapping	Zoning
2019	Establish legal authority for post-construction stormwater management	Zoning
	Complete DCIA Mapping	WestCOG / DPW
2020	Update DCIA Mapping	WestCOG / DPW
2021	Update DCIA Mapping	WestCOG / DPW

(6) POLLUTION PREVENTION /GOOD HOUSEKEEPING

Goal:

Prevent or reduce pollutant runoff and protecting water quality from all Brookfield owned or operated MS4s.

Minimum Requirements:

- ☐ (A) Employee Training
- ☐ (B) Infrastructure Repair, Rehabilitation and Retrofit
- ☐ (C) MS4 Property and Operations Maintenance
- ☐ (D) Street, Parking & MS4 Maintenance
- ☐ (E) Snow Management Practices
- ☐ (F) Interconnected MS4s
- ☐ (G) Sources Contributing pollutants to the MS4
- ☐ (H) Additional Measures for discharges to impaired waters (with or without a TMDL)

Brookfield will implement an operations and maintenance program to prevent or reduce pollutant runoff from town facilities and protect water quality.

6.1 Employee training program (A)

Brookfield will continue its existing MS4 training program for town employees to increase awareness of water quality issues. These trainings will include:

- Standard operating procedures consistent with the MS4 general permit;
- General goals and objectives of this Stormwater Management Plan;
- Identification and reporting of illicit discharges and improper disposal; and
- Spill response protocols and responsibilities.

These trainings may include regional or statewide trainings coordinated by WestCOG, UConn CLEAR or others.

[Training Program should include who is responsible for administering it.]

6.2 Infrastructure Repair, Rehabilitation and Retrofit

Brookfield will continue to repair, rehabilitate, or upgrade its MS4 infrastructure in a timely manner to reduce or eliminate the discharge of pollutants into water bodies. This program will be responsive to new information on outfalls discharging pollutants, impaired waters, inspections, or observations made during outfall mapping under the IDDE section of this plan.

6.3 Directly Connected Impervious Area (DCIA) disconnection tracking (B)

Brookfield will annually track the total acreage of Directly Connected Impervious Area (DCIA) that is disconnected from the MS4 as a result of redevelopment or retrofit projects within the town. For each retrofit/redevelopment project, Brookfield will document the amount of existing DCIA that is

disconnected. The total amount of disconnected DCIA will be reported each year in the Annual Report. Starting on July 1, 2021, [TOWN's] goal will be to reduce 1% of its total DCIA acreage per year to the maximum extent possible. Brookfield will provide updates on this goal in its annual report. Brookfield will also incorporate all DCIA disconnections which occurred in the town since July 1, 2012 towards meeting this goal.

6.4 DCIA Retrofit Planning (B)

By June 30, 2020, Brookfield will develop a Retrofit Project Plan to identify and prioritize potential DCIA disconnection projects. The plan will identify and prioritize sites that may be suitable for a disconnection. Prioritization will be based on several factors, including whether the project lies within one of the MS4 priority areas (urbanized area, DCIA >40%, discharge to impaired waters). Brookfield will include in its annual report for the third year of the permit (2020-2021) its identification and prioritization process, a rationale for the selection of projects to be implemented, and the total acres of DCIA to be disconnected upon implementation. The implementation of projects in this plan will begin by June 30, 2022.

6.5 MS4 Property and Operations Maintenance (C)

Brookfield-owned or -operated properties, parks, and other facilities that are owned, operated, or otherwise the legal responsibility of Brookfield will be maintained so as to minimize the discharge of pollutants to its MS4. Such maintenance will include, but not be limited to:

(i) Parks and open space

Brookfield will optimize the application of fertilizers by municipal employees, institutional staff, or private contractors on lands and easements for which it is responsible for maintenance. Optimization practices considered may include:

- conducting soil testing and analysis to determine soil phosphorus levels,
- the reduction or elimination of fertilizers,
- reduction of fertilizer usage by adhering to the manufacturers' instructions,
- use of alternative fertilizers forms (i.e. products with reduced, slow-releasing, or insoluble phosphorus compositions),
- proper storage and application practices (i.e. avoid impervious surfaces),
- application schedule (i.e. appropriate season or month) and timing (i.e. coordinated with climatic conditions to minimize runoff potential);
- standard operating practices for the handling, storage, application, and disposal of pesticides and herbicides in compliance with applicable state and federal laws;
- evaluating reduced mowing frequencies and use of alternative landscaping materials like drought resistant and native plantings;
- establish procedures for management of trash containers at parks (scheduled cleanings; sufficient number).

Brookfield will establish practices for the proper disposal of grass clippings and leaves at Brookfield-owned lands. Clippings shall be composted or otherwise appropriately disposed. Clippings will not enter the MS4 system or waters of the state.

(ii) Pet waste management

Brookfield will identify locations where inappropriate pet waste management practices are immediately apparent and pose a threat to receiving water quality due to proximity and potential for direct conveyance of waste to its storm system and waters. In such areas, Brookfield will, implement targeted management efforts such as public education and enforcement (e.g. increased patrol for violators).

In Brookfield-owned recreational areas where dog walking is allowed, Brookfield will install educational signage, pet waste baggies, and disposal receptacles (or require carry-out).

Brookfield will document its efforts in its annual reports. Brookfield should consider including information regarding the scope and extent of its education, compliance, and enforcement efforts (including the number of violations pursued and fines levied or other enforcement taken).

(iii) Waterfowl management

Brookfield will identify lands where waterfowl congregate and feeding by the public occurs.

To raise awareness regarding the water quality impacts, Brookfield will install signage or use other targeted techniques to educate the public about the detrimental impacts of feeding waterfowl (including the resulting feces deposition) and discourage such feeding practices.

Brookfield will also implement practices that discourage the undesirable congregation of waterfowl in these areas, or otherwise isolate the direct drainage from these areas away from its storm system and waters.

(iv) Brookfield Buildings and facilities (schools under the jurisdiction of Brookfield, town offices, police and fire stations, pools, parking garages and other Brookfield-owned or operated buildings or utilities)

Brookfield will

- evaluate the use, storage, and disposal of both petroleum and non-petroleum products and ensure, through employee training, that those responsible for handling these products know proper procedures;
- ensure that Spill Prevention Plans are in place, if applicable, and coordinate with the fire department as necessary;
- develop management procedures for dumpsters and other waste management equipment;
- sweep parking lots and keep areas surrounding the facilities clean to minimize runoff of pollutants;
- ensure that all interior building floor drains are not connected to the MS4 and are appropriately permitted.

(v) Vehicles and Equipment

Brookfield will

- establish procedures for the storage of Brookfield-owned or -operated vehicles;
- require vehicles with fluid leaks to be stored indoors or in contained areas until repaired;
- evaluate fueling areas owned by Brookfield and used by Brookfield owned or -operated vehicles and if possible, place fueling areas under cover in order to minimize exposure;

- establish procedures to ensure that vehicle wash waters are not discharged to the municipal storm sewer system or to surface waters;
- ensure any interior floor drains are appropriately permitted.

(vi) Leaf Management

Brookfield will establish and implement procedures to minimize or prevent the deposition of leaves in catch basins, streets, parking lots, driveways, sidewalks or other paved surfaces that discharge to the MS4. Such procedures shall also apply to leaves collected by Brookfield.

6.6 Street, Parking & MS4 Maintenance (D)

Brookfield will implement a program to provide for regular inspection and maintenance of Brookfield-owned or -operated streets, parking areas and other MS4 infrastructure.

(i) Sweeping

- Brookfield will establish and implement procedures for sweeping town-owned or operated streets and parking lots. All streets and parking lots within the MS4 Priority Areas will be inspected, swept and/or cleaned (as necessary) at least once per year in the spring following the cessation of winter maintenance activities (i.e. sanding, deicing, etc.). The procedures shall also include more frequent inspections, cleaning and/or sweeping of targeted areas determined by Brookfield to have increased pollutant potential based on the presence of active construction activity or other potential pollutant sources. Brookfield will identify such potential pollutant sources based upon surface inspections, catch basin cleaning or inspection results, land use, winter road deicing and/or sand application, impaired or TMDL waters or other relevant factors as determined by Brookfield. If wet dust suppression is conducted, the use of water will be minimized such that a discharge of excess water to surface waters and/or the storm sewer system does not occur.

For streets and parking lots outside the MS4 Priority Areas, including any rural uncurbed streets and parking lots with no catch basins, Brookfield will either meet the minimum frequencies above, or develop and implement an inspection, documentation and targeted sweeping and/or cleaning plan for those areas by June 30, 2018 and submit such plan with its year one Annual Report. For new and redeveloped municipal parking lots, Brookfield will evaluate options for reducing stormwater runoff to surface waters and/or the storm sewer system by the installing pervious pavements and/or other measures to promote sheet flow of stormwater.

- Brookfield will ensure the proper disposal of street sweepings in accordance with DEEP policies, guidance and regulations. Sweepings shall not be discharged back into the storm drain system and/or surface waters.
- Brookfield will document results of its sweeping program in its annual reports including: a summary of inspection results, curb miles swept, dates of cleaning, volume or mass of material collected, and method(s) of reuse or disposal. Brookfield will also include documentation of any alternate sweeping plan for rural uncurbed streets and any runoff reduction measures implemented.

(ii) Catch Basin Cleaning

Brookfield will conduct routine cleaning of all catch basins and track catch basin inspection observations. Utilizing information compiled through its inventory of catch basins, operational staff and public complaints, Brookfield will optimize routine cleaning frequencies for particular structures or catchment areas as follows to maintain acceptable sediment removal efficiencies:

- a. Inspect all Brookfield-owned catch basins within MS4 Priority Areas at least once by June 30, 2020. Catch basins outside the MS4 Priority Areas shall be inspected by June 30, 2022.
- b. Prioritize inspection and maintenance for Brookfield-owned catch basins located near impaired waters and construction activities (roadway construction, residential, commercial, or industrial development or redevelopment). Brookfield will clean catch basins in such areas more frequently if inspection and maintenance activities indicate excessive sediment or debris loadings.
- c. Establish a schedule such that the frequency of routine cleaning will ensure that no catch basin at any time will be more than fifty (50) percent full. A catch basin sump is more than 50 percent full if the contents within the sump exceed one half the distance between the bottom interior of the catch basin to the invert of the deepest outlet of the catch basin.
- d. If a catch basin sump is more than fifty (50) percent full during two consecutive routine inspections/cleaning events, Brookfield will document that finding, investigate the contributing drainage area for sources of excessive sediment loading, and to the maximum extent practicable, abate contributing sources. Brookfield will describe any actions taken in its Annual Report.
- e. Brookfield will detail its plan for optimizing catch basin cleaning, inspection plans, and its schedule for gathering information to develop the optimization plan in its first annual report. Documentation shall include metrics and other information used to reach the determination that the established plan for cleaning and maintenance is optimal for the MS4. Brookfield will keep a log of catch basins cleaned or inspected.
- f. Brookfield will report in each Annual Report the total number of catch basins, number inspected, number cleaned, the total volume or mass of material removed from all catch basins and, if practicable, the volume or mass of material removed from each catch basin draining to water quality limited waters.

6.7 Snow Management Practices (E)

(i) Deicing Material Management

Brookfield will develop and implement standard operating practices for the use, handling, storage, application, and disposal of deicing products such as salt and sand to minimize exposure to stormwater; consider means to minimize the use and optimize the application of chloride-based or other salts or deicing product (while maintaining public safety) and consider opportunities for use of alternative materials; for any exterior containers of liquid deicing materials installed after July 1, 2017, Brookfield will provide secondary containment of at least 110% of the largest container or 10% of the total volume of all containers, whichever is larger, without overflow from the containment area.

(ii) Snow and Ice Control Practices

Brookfield will implement and refine its standard operating practices regarding its snow and ice control to minimize the discharge of sand, anti-icing or de-icing chemicals and other pollutants (while maintaining public safety).

Brookfield will establish goals for the optimization of sand and/or chemical application rates through the use, where practicable, of automated application equipment (e.g. zero-velocity spreaders), anti-icing and pre-wetting techniques, implementation of pavement management systems, and alternate chemicals.

Brookfield will maintain records of the application of sand, anti-icing and/or de-icing chemicals to document the reduction of chemicals to meet established goals.

Brookfield will ensure the proper training for deicing applications for municipal employees, institutional staff, or private contractors on lands and easements for which it is responsible for maintenance.

Brookfield will manage and dispose of snow accumulations in accordance with DEEP's Best Management Practices for Disposal of Snow Accumulations from Roadways and Parking Lots, revised 2/4/11 and as amended (see link at: www.ct.gov/deep/stormwater).

In its Annual Report, Brookfield will document results of its snow removal program including, at a minimum: the type of staff training conducted on application methods and equipment, type(s) of deicing materials used; lane-miles treated; total amount of each deicing material used; type(s) of deicing equipment used; any changes in deicing practices (and the reasons for the change); and snow disposal methods.

6.8 Interconnected MS4s (F)

Brookfield will coordinate with operators of interconnected MS4s (such as neighboring municipalities, institutions and DOT) regarding the contribution of potential pollutants from the storm sewer systems, contributing land use areas and stormwater control measures in the respective MS4s. This same coordination shall be conducted regarding operation and maintenance procedures utilized in the respective systems.

6.9 Sources contributing pollutants to the MS4 (G)

Brookfield will develop and implement a program to control the contribution of pollutants to its MS4 from commercial, industrial, municipal, institutional or other facilities, not otherwise authorized by permit issued pursuant to Sections 22a-430 or 22a-430b of the Connecticut General Statutes

6.10 Additional Measures for discharges to impaired waters (H)

[Note: If your town waterways have any of the impairments listed below, included the section(s) indicated.]

(i) For waters for which Nitrogen or Phosphorus is a Stormwater Pollutant of Concern: On Brookfield-owned or -operated lands, Brookfield implement a turf management practices and procedures policy which includes, but is not limited to, procedures for proper fertilizer application and the planting of native plant materials to lessen the amount of turf area requiring mowing and the application of chemicals. Each Annual Report will discuss the actions taken to implement this policy with an estimate of fertilizer and turf reduction.

(ii) For waters for which Bacteria is a Stormwater Pollutant of Concern:

On Brookfield-owned or -operated lands with a high potential to contribute bacteria (such as dog parks, parks with open water, sites with failing septic systems), Brookfield will develop, fund, implement, and prioritize a retrofit or source management program to correct the problem(s) within a specific timeframe. Each Annual Report will identify problem areas for which a retrofit or source management program were developed, the location of the closest outfall monitored in accordance with Section 6(i), the cost of such retrofit or program, and the anticipated pollutant reduction. On Brookfield-owned or -operated lands, prohibit the feeding of geese or waterfowl and implement a program to manage geese and waterfowl populations. Each Annual Report will discuss the actions taken to implement this program.

Table 6 Pollutions prevention/ good housekeeping BMP implementation schedule

	BMP	Responsible Person
2017	Continue implementing employee MS4 training	DPW / Land Use
	Develop catch basin cleaning plan	DPW
	Track disconnected DCIA Acreage	Land Use
	Establish and Implement Procedures for	Land Use / P&R / DPW
	parks and open space	
	pet waste	
	waterfowl	
	buildings and facilities	
	vehicles and equipment	
	leaves	
	street sweeping (including plan for outside priority area)	
	Street Sweeping plan for non-priority areas	
2018	Deicing Material	
	snow and ice control	
2018	Track disconnected DCIA Acreage	Land Use
	Develop Retrofit Project Plan	Land Use
2019	Track disconnected DCIA Acreage	Land Use
2020	Track disconnected DCIA Acreage	Land Use
2021	Have 2% DCIA disconnected. Every additional year 1% disconnection.	Land Use
	Track disconnected DCIA Acreage	Land Use

Water Quality Monitoring

Brookfield will implement a sampling and water quality monitoring program for waterbodies within its boundaries.

Impaired Waters Outfall Inventory & Screening

By June 30, 2018, Brookfield will create an inventory of all outfalls to impaired waters and screen each of those outfalls for the pollutant identified as the pollutant of concern, utilizing the procedure identified in the General Permit. Any screening of those outfalls conducted as part of the 2004 MS4 General Permit will be used by TOWN to satisfy this screening requirement for that outfall.

At least 50% of the outfalls to impaired waters will be screened by June 30, 2020. All outfalls to impaired waters will be screened by June 30, 2022.

Impaired Waters Outfall Follow-up Investigations

By June 30, 2019, Brookfield will begin investigating activities within the drainage areas to each outfall identified during screening as potentially associated with the cause of impairment. This investigation will include:

- land use/development patterns,
- business or commercial activities,
- industrial activities,
- DCIA,
- natural contributors,
- potential MS4 maintenance issues,
- residential activities, or
- any other activities that might be related to the impairment.

For each area identified for follow-up investigation, Brookfield will implement a BMP focused on the impaired waters provisions of each of the 6 minimum control measures.

Monitoring

After at least 50% of the outfalls have been screened, Brookfield will utilize the results to identify six of the highest contributors of any pollutants of concern. Brookfield will annually sample those six outfalls for the identified pollutant of concern. If more than one pollutant is identified for the outfall, all pollutants identified will be monitored.

Results Reporting

The findings of these screenings, investigations and monitoring will be documented and the results included in Brookfield's annual report. These reports will include a listing of the outfalls screened, the number of outfalls identified for follow-up screening, the progress of drainage area investigations, a description of the control measure implementation for the different impairments, identification of the six outfalls to be monitored, and the results of the prioritized outfall monitoring.

Monitoring/screening will be conducted according to the methods identified in Title 40, CFR, Part 136 (1990) and laboratory analyses will be consistent with Connecticut Reasonable Confidence Protocol

Appendix A

Abbreviations and Definitions

The definitions of terms used in this general permit shall be the same as the definitions contained in Sections 22a-423 and 22a-207 of the Connecticut General Statutes and Section 22a-430-3(a) of the Regulations of Connecticut State Agencies. As used in this general permit, the following additional definitions shall apply:

“ADT” means average daily traffic

“Authorized activity” means any activity authorized under the General Permit for the Discharge of Storm Water from Small Municipal Separate Storm Sewer Systems.

“Best Management Practices (BMP)” means those practices, which reduce pollution and which have been determined by the Commissioner of the Connecticut Department of Environmental Protection, to be acceptable based on, but not limited to, technical, economic, and institutional feasibility.

“Catch Basin” means any structure designed and constructed to collect storm water runoff and convey the flows through a storm sewer system.

“CLA” means Candlewood Lake Authority.

“ConnDOT” means the Connecticut Department of Transportation.

“CTDEP” means the Connecticut Department of Environmental Protection.

“CTDOT” means the Connecticut Department of Transportation.

“CWA” means Clean Water Act.

“Drainage System” means any structure(s) or facility, including inlets, catch basins, storm drains, underdrains, ditches, channels, culverts, designed and constructed for the removal of storm water from streets, highway sections, parking areas, and other drainage areas.

“Dry Weather Flows” means flows that exist within storm sewer systems during dry weather periods experiencing little or no precipitation.

“EPA” means the United States Environmental Protection Agency.

“Facility” may be defined by the following, but not be limited to buildings, parking lots, highways, roadways and railways.

“First Flush” Pollutants deposited on to exposed areas can be dislodged and entrained by the rainfall-runoff process. Usually the stormwater that initially runs off an area will be more polluted than the stormwater that runs off later, after the rainfall has “cleansed” the catchment. The stormwater containing this high initial pollutant load is called the “first flush”.

“Illicit Discharge” means any unpermitted discharge to waters of the state that does not consist entirely of stormwater or uncontaminated groundwater except those discharges identified in Section 3.1.6 of the CTDOT General Permit for the Discharge of Storm Water from Small Municipal Separate Storm Sewer Systems.

“Inland wetland” means wetlands as that term is defined in Section 22a-38 of the Connecticut General Statutes.

“Minimum Control Measure” means the measures as described by EPA, when implemented in concert, are expected to result in significant reductions of pollutants discharged into receiving waterbodies.

“Municipal separate storm sewer system (MS4)” means conveyances for stormwater, including, but not limited to, roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains owned or operated by any municipality, State agency or Federal agency and discharging directly to surface waters of the state.

“NPDES” means the National Pollution Discharge Elimination System.

“Outfall” means the mechanism or structure by which a storm sewer, storm drain, stream or water-course discharges to a receiving water body.

“Point Source” means any discernible, confined and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged.

“Pollutants” means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

“PSA” means Public Service Announcement.

“Registrant” means a municipality, State agency or Federal agency, which files a registration pursuant to Section 4 of the NPDES Phase II MS4 general permit.

“Registration” means a registration form filed with the Commissioner pursuant to Section 4 of the NPDES Phase II MS4 general permit.

“Regulated Small MS4” means any Small MS4 (as defined below) authorized by this general permit including all those located partially or entirely within an Urbanized Area and those additional Small MS4s located outside an Urbanized Area which, as of the issuance of this general permit, have been designated by the Commissioner as Regulated Small MS4s. A list of these MS4s is included in Appendix A of the NPDES Phase II MS4 general permit.

“Retain or retention” means to permanently hold stormwater runoff on-site with no subsequent point source release.

“*Small MS4*” means any MS4 that is not already authorized by the Phase I MS4 stormwater program including State and Federally owned systems, such as colleges, universities, prisons, and military bases. State and Federally-owned MS4’s are authorized under separate general permits.

“*State*” means the State of Connecticut

“*Storm Drain*” means inlet, including catch basins, which capture stormwater runoff for conveyance through a storm sewer system.

“*Storm Sewer System*” means any structure(s) or facility, including inlets, catch basins, storm drains, under-drains, ditches, channels, culverts, designed and constructed for the removal of water from streets, highway sections, parking areas, and other drainage areas.

“*Stormwater*” means waters consisting of precipitation runoff.

“*Stormwater Management Plan (SWMP)*” means a stormwater management program required under the general permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems, designed to reduce the discharge of pollutants from the Small MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.

“*Urbanized Area (UA)*” means the areas of the State Of Connecticut so defined by the U.S. Census Bureau for the 2000 Census.

“*Total Maximum Daily Load (TMDL)*” means the maximum capacity of surface water to assimilate a pollutant as established by the Commissioner of the Connecticut Department of Environmental Protection including pollutants contributed by point and non-point sources and a margin of safety.

“*Water Bodies*” means any natural or artificial inland body of water or expanded part of a water-course, including lakes, ponds and reservoirs.

“*Water Courses*” means any natural or artificial channel including, rivers, creeks, streams, wash, arroyo, channels or other topographic feature on or over which waters flow at least periodically.

“*WQF*” means Water Quality Flow as described in chapter 11, appendix C, of the CTDOT Drainage Manual 2000.

“*Waterways*” means any navigable body of water, such as a river, channel, or canal.

Appendix B

Stormwater Management Plan Signature and Certification

 Steve Dunn / First Selectman

 Date

Stormwater Management Plan Engineering Certification

I hereby certify that I am making this certification in connection with a registration under the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems, submitted to the Commissioner by [INSERT NAME OF REGISTRANT] for an activity located at or within [NAME OF MUNICIPALITY OR ADDRESS OF THE REGISTERED ACTIVITY] and that all terms and conditions of the general permit are being met for all discharges which have been created, initiated or maintained and such activity is eligible for authorization under such permit. I further certify that a system is in place to ensure that all terms and conditions of this general permit will continue to be met for all discharges authorized by this general permit at the site. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(8)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I certify that I have made an affirmative determination in accordance with Section 3(b)(8)(B) of this general permit. I understand that the registration filed in connection with such general permit is submitted in accordance with and shall comply with the requirements of Section 22a-430b of Connecticut General Statutes, as amended by Public Act 12-172. I also understand that knowingly making any false statement made in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law.

Ralph Tedesco PE






Signature

Date

Brookfield, Connecticut

Natural Diversity Data Base Areas BROOKFIELD, CT December 2016

 State and Federal Listed Species
& Significant Natural Communities
 Town Boundary

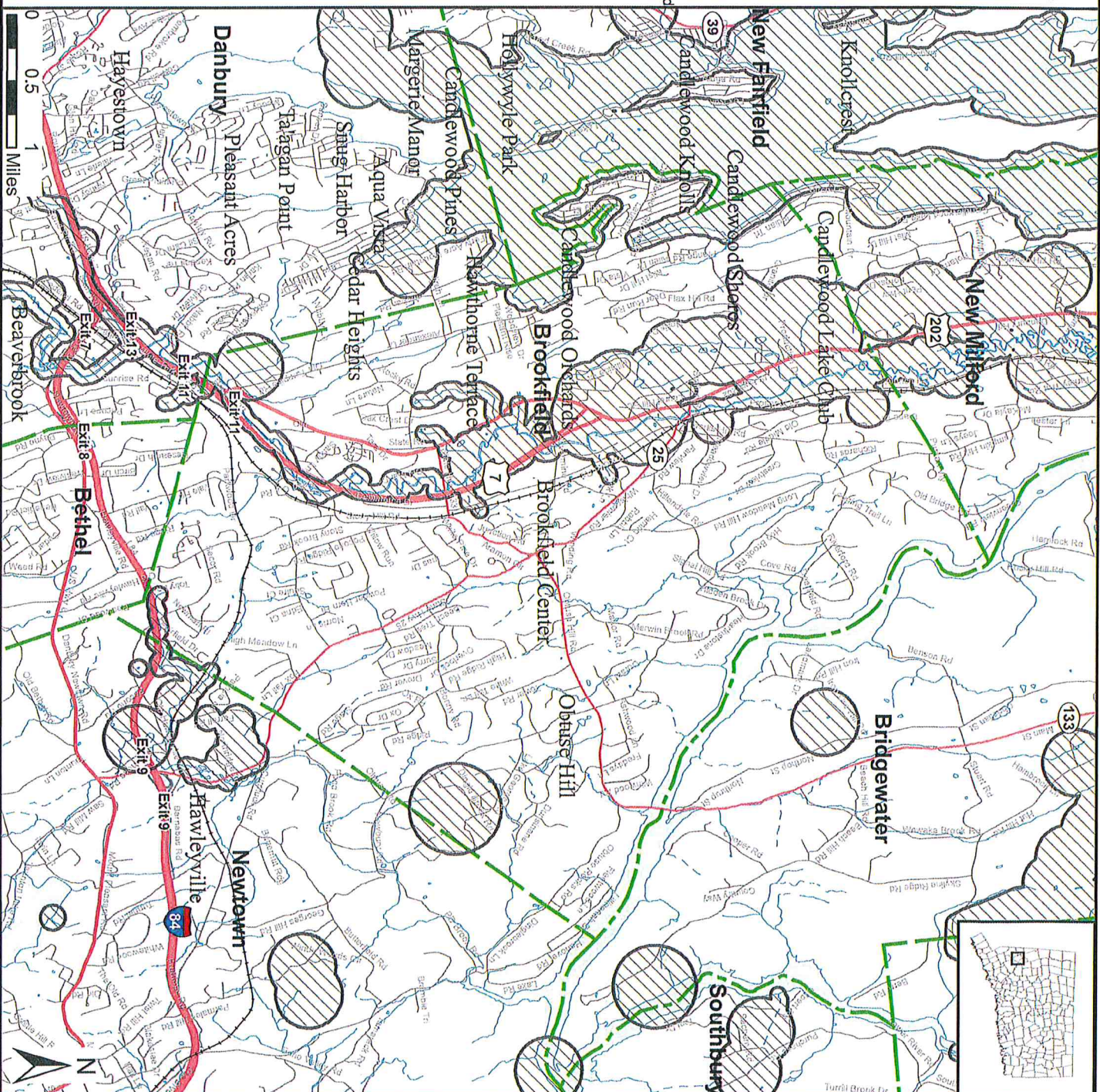
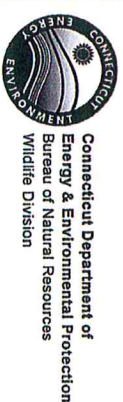
NOTE: This map shows general locations of State and Federal Listed Species and Significant Natural Communities. Information on listed species is collected and compiled by the Natural Diversity Data Base (NDDB) from a number of data sources. Exact locations of species have been buffered to produce the general locations. Exact locations of species and communities occur somewhere in the shaded areas, not necessarily in the center. A new mapping format is being employed that more accurately models important riparian and aquatic areas and eliminates the need for the upstream/downstream searches required in previous versions.

This map is intended for use as a preliminary screening tool for conducting a Natural Diversity Data Base Review Request. To use the map, locate the project boundaries and any additional affected areas. If the project is within a shaded area there may be a potential conflict with a listed species. For more information, complete a Request for Natural Diversity Data Base State Listed Species Review form (DEP-APP-007), and submit it to the NDDB along with the required maps and information. More detailed instructions are provided with the request form on our website.

www.ct.gov/deep/nddbrequest

Use the CTECO Interactive Map Viewers at www.cteco.uconn.edu to more precisely search for and locate a site and to view aerial imagery with NDDB Areas.

QUESTIONS: Department of Energy and Environmental Protection (DEEP)
79 Elm St., Hartford CT 06106
Phone (860) 424-3011



AQUIFER PROTECTION AREAS

Brookfield, CT

May 12, 2016

- Level A APA (Final Adopted)
- Level A APA (Final)
- Level B APA (Preliminary)
- Town Boundary

NOTE: The Aquifer Protection Areas were delineated through Connecticut's Level A and Level B Mapping Processes. Aquifer Protection Areas are delineated for active public water supply wells in stratified drift that serve more than 1000 people, in accordance with Sections 22a-354c and 22a-354z of the Connecticut General Statutes. Level B Mapping delineates a preliminary aquifer protection area, providing an estimate of the land area from which the well draws its water. Level A Mapping delineates the final Aquifer Protection Area, which becomes the regulatory boundary for land use controls designed to protect the well from contamination. As Level A Mapping is completed for each well field and approved by DEEP, it replaces the Level B Mapping. Final Adopted Level A Areas are those where towns have land use regulations for them. Massachusetts and Rhode Island Wellhead Protection Areas may be shown for informational purposes.

QUESTIONS:
Bureau of Water Protection and Land Reuse
Planning and Standards Division
Phone: (860) 424-3020
www.ct.gov/deep/aquiferprotection

